

EPI UPDATE

FRANKFURT, JUNE 19TH, 2019

ARM HPC USER'S GROUP



PHILIPPE NOTTON / GM EPI – SIPEARL CEO

EUROPEAN PROCESSOR INITIATIVE

- High Performance General Purpose Processor for HPC, ARM based
- High-performance EPI-made accelerator
- Computing platform for edge and autonomous cars

THE EPI STORY, PART 1

- Having 10 countries, 26 partners working together to win the EU call ?



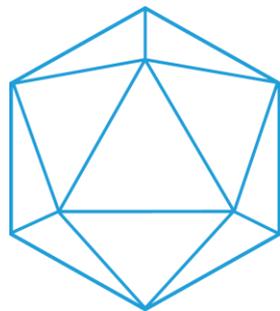
THE EPI STORY, PART 2

- Sharing all together a common technical vision in terms of architecture and product ?



THE EPI STORY, PART 3

- Giving an industrial vision and industrial hand to EPI



SIPEARL

THE EPI STORY, PART 4

- Having access to ARM technology



SO NOW LET'S HAVE THIS EU
SOLUTION READY !



26 EPI PARTNERS



Rolls-Royce
Motor Cars Limited

Atos



Barcelona
Supercomputing
Center
Centro Nacional de Supercomputación



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



CHALMERS



UNIVERSITÀ DI PISA



UNIVERSITY OF ZAGREB
FACULTY OF
ELECTRICAL
ENGINEERING
AND COMPUTING



COMPUTER
ENGINEERING



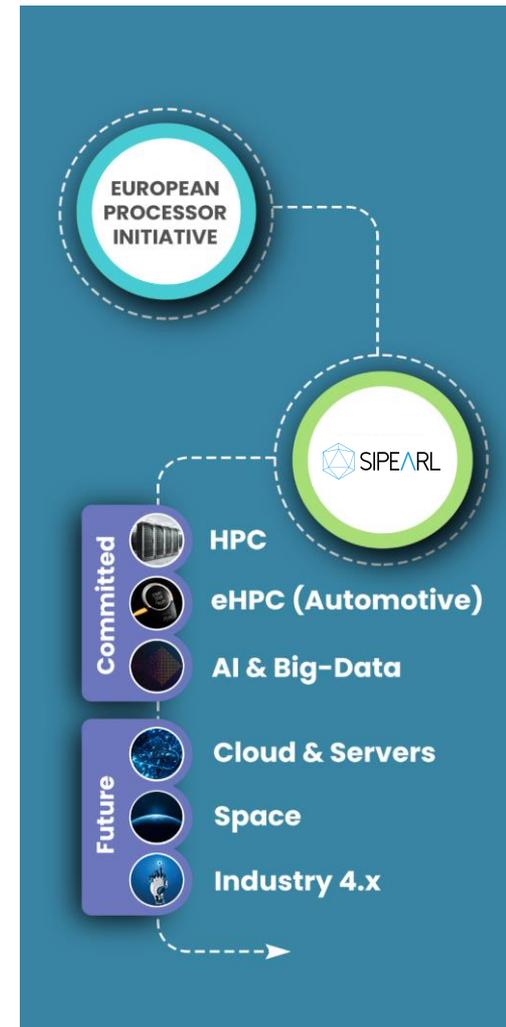
ETH zürich



EPI FABLESS COMPANY

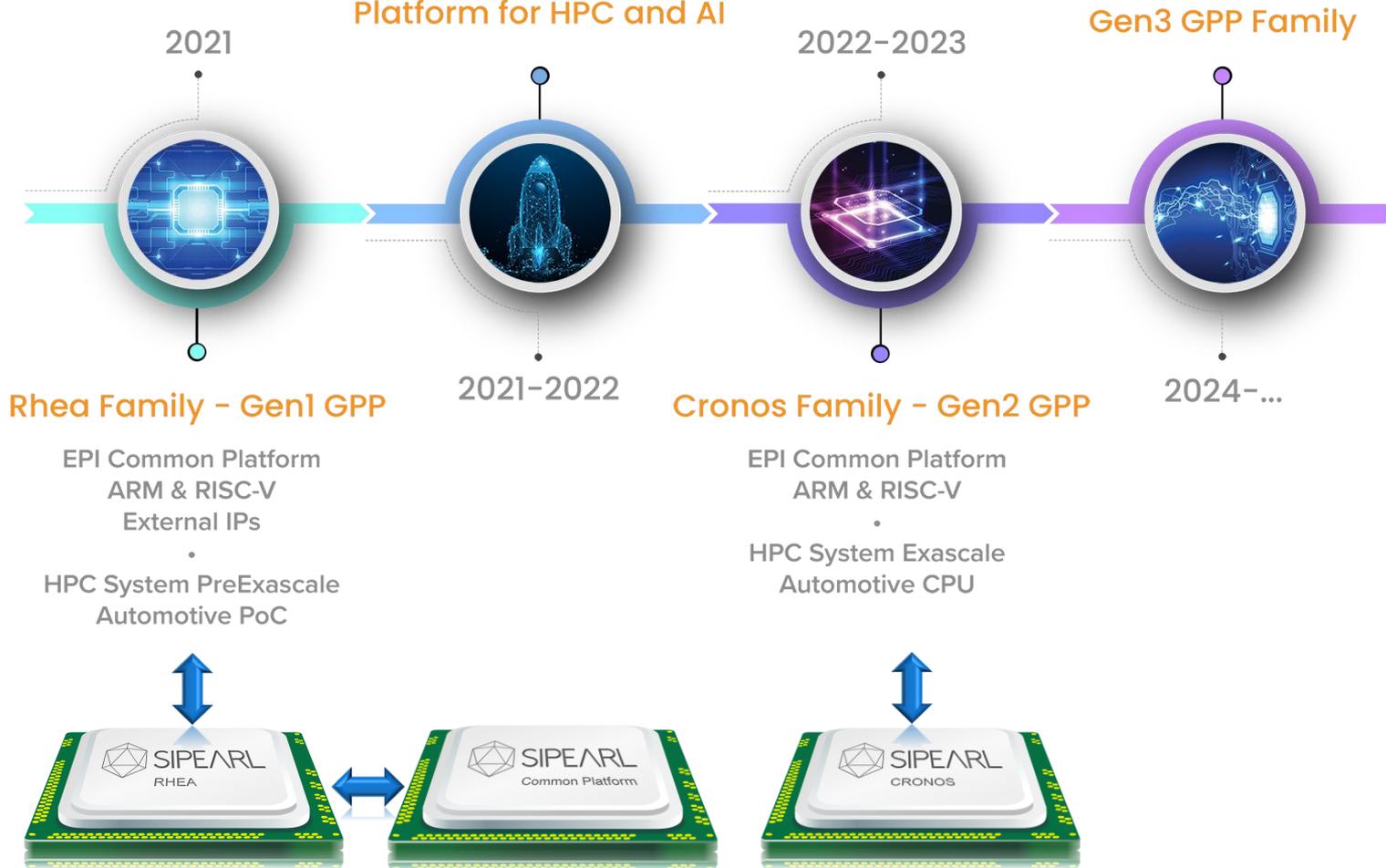
- EPI's Fabless company
 - licence of IPs from the partners
 - develop own IPs around it
 - licence the missing components from the market (such as ARM IP's)
 - Incorporated now as SIPEARL

- integrate, market, support & sales the chip
- generate revenue from both the HPC, IA, server and eHPC markets
- work on the next generations
- The industrial 'hand' of EPI

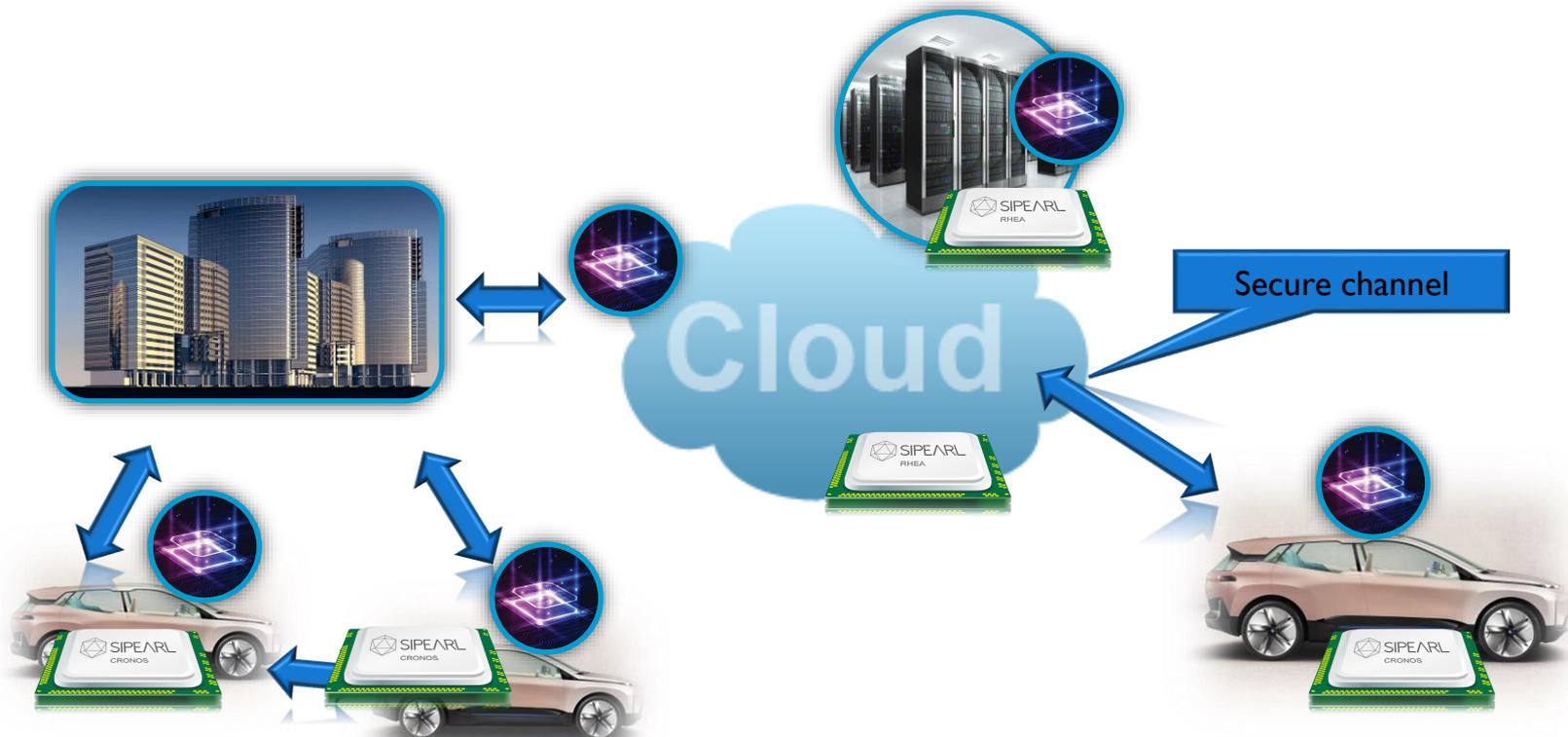


ROADMAP

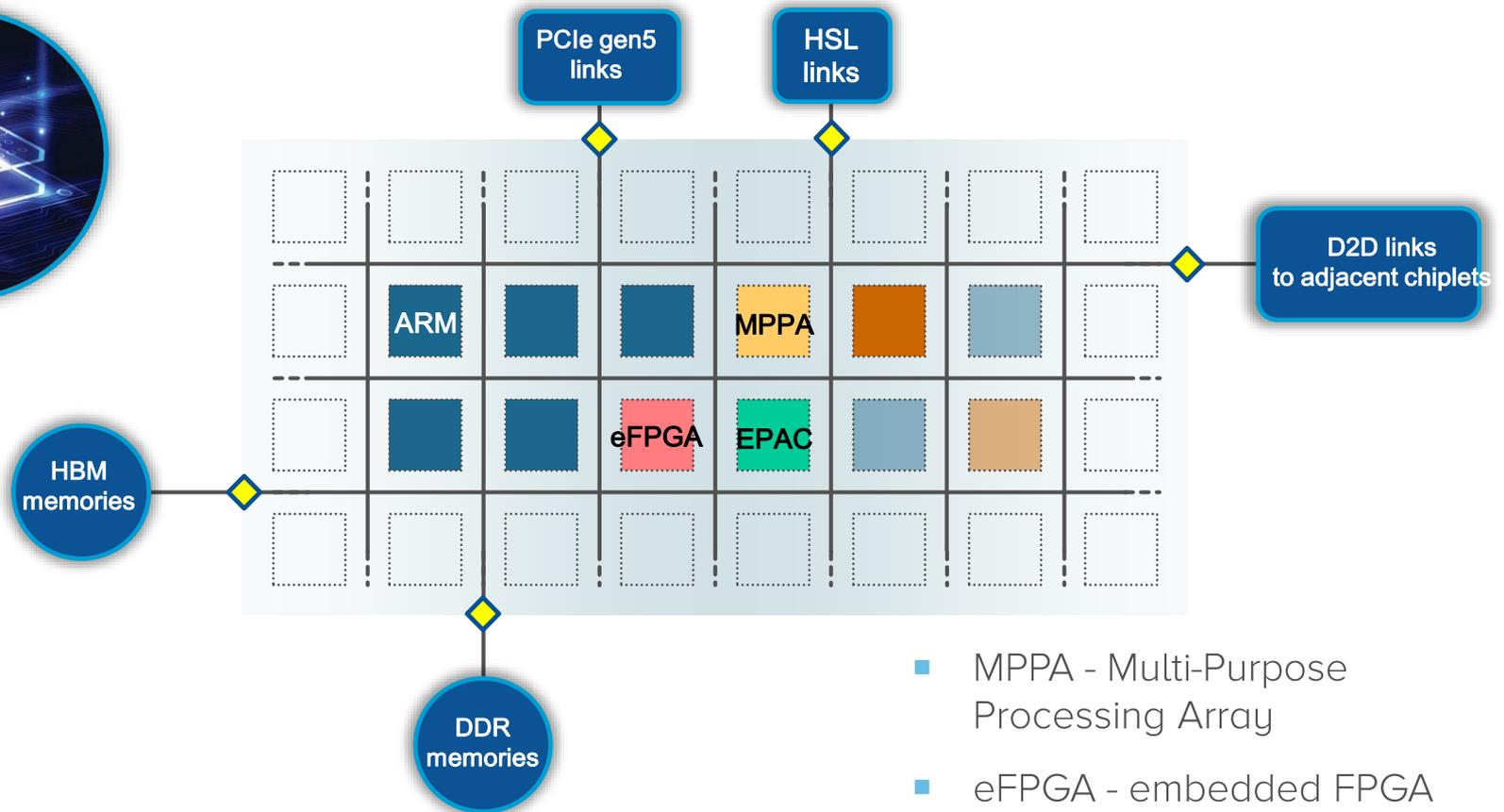
EPI IP's Launch Pad
&
Pan European Research
Platform for HPC and AI



END2END SECURITY – FROM THE AUTOMOTIVE SYSTEM TO THE CLOUD



GPP AND COMMON ARCHITECTURE

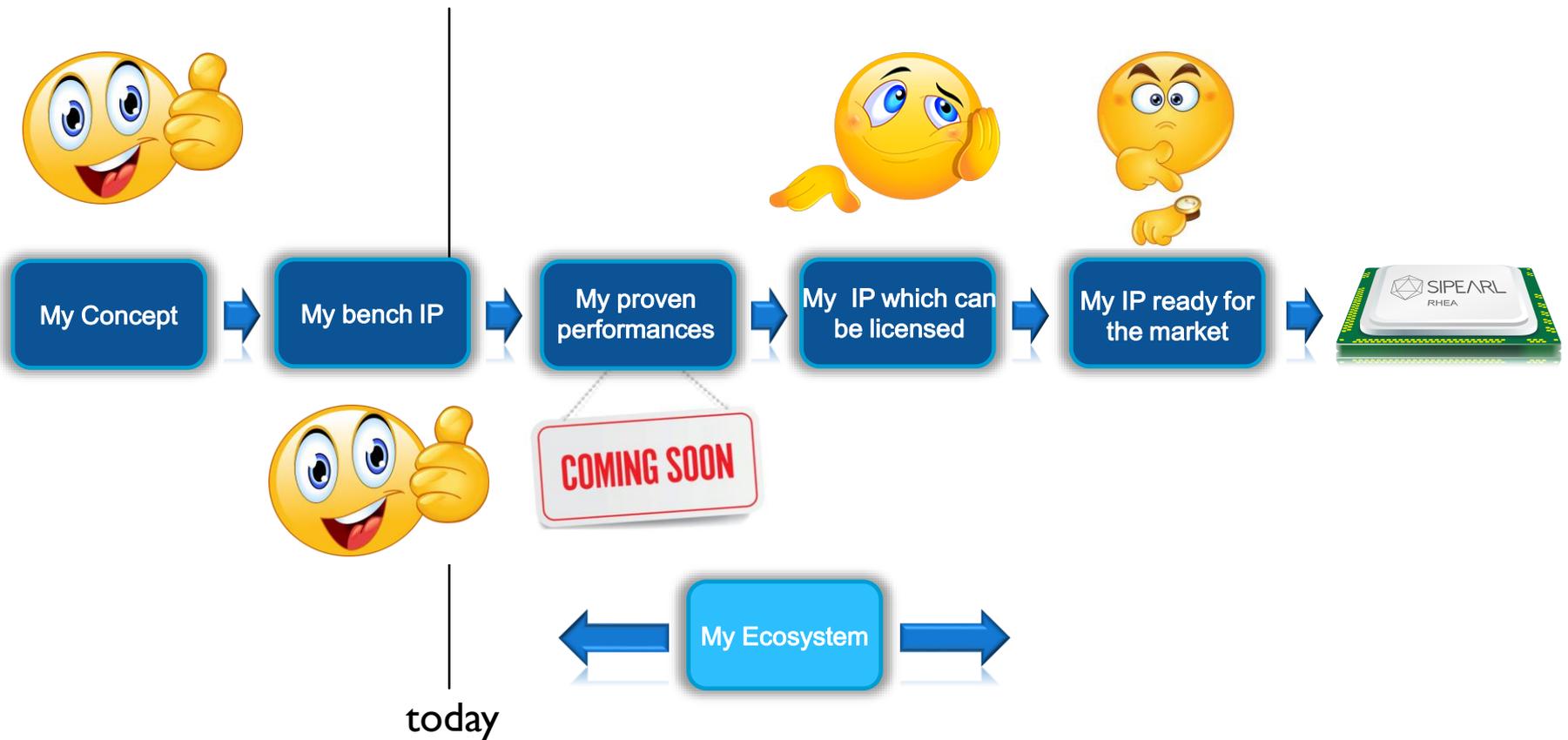


- MPPA - Multi-Purpose Processing Array
- eFPGA - embedded FPGA
- EPAC - EPI Accelerator

WHY ARM... (WITHIN EPI CONTEXT)

- TIME 2 MARKET → 3 years to do it
- ECOSYSTEM → is taking off in HPC
- MAKE OR BUY....

...VERSUS AN EPI HOME MADE CPU IP



RHEA ADVANCED FIGURES



Under NDA on a case by case basis with SiPearl
Based on 18months of architecture work and simulations

THANK YOU

- Questions ?



 www.european-processor-initiative.eu

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